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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/586,077 Filing Date: August 29, 2006 Appellant(s): GINZEL ET AL.

Alfred W. Froebrich
For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 9/28/2009 appealing from the Office action mailed 2/26/2009.

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#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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#### (8) Evidence Relied Upon

4,658,468 Tillman et al. 4-1987

2003/0213092 Fischbach et al. 11-2003

3,742,553 Sittmann 7-1973

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 18-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tillmann et al. (US 4,658,468) herein referred to as '468 in view of Fischbach et al. (US 2003/0213092) herein referred to as '092.
- 8. For Claim 18, '468 discloses a door closer comprising: a housing (Fig. 2: 16); a shaft (13) supported in the housing and connectable to a door; a brake piston (37)

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supported in the housing and charging the shaft, the brake piston and the housing defining a first space (38) away from the shaft; a blocking member (28, 26); a first spring (29) loading the blocking member and extending orthogonally from the housing (wherein the first spring extends orthogonally with respect to the end of the housing); wherein the shaft is lockable in a position by the blocking member. '468 does not disclose a pump for providing at least one of the functions of pumping brake fluid to the first space and pumping brake fluid from the first space, the pump being disposed in a second space formed between the housing and the first spring, wherein the shaft is lockable in a position by the blocking member. '092 teaches a door closer having a pump (Fig. 7: 44) for providing at least one of the functions of pumping brake fluid to a first space (9) and pumping brake fluid from the first space, the pump being disposed in a second space formed between the housing and the first spring. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the pump of '092 to the door closer of '468 in order to allow for motorized opening assistance of the door.

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9. '468 in view of '092 further discloses wherein the housing has a longitudinal housing direction (as seen in Fig. 1 of '468). '468 in view of '092 does not teach wherein the first spring extends orthogonally to the longitudinal housing direction. It would have been obvious to one of ordinary skill in the art at the time of the invention to rearrange the spring member so as to be orthogonal to the longitudinal housing direction as it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. See also, *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). See also MPEP 2144.04.

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10. For Claim 19, '468 discloses the door closer of claim 18, except wherein the door closer further comprises a drive motor for driving the pump, the drive motor being disposed in the second space. '092 further teaches a drive motor (45) for driving the pump, the drive motor being disposed in the second space. It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the pump and motor of '092 to the door closer of '468 in order to allow for motorized opening assistance of the door.

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- 11. For Claims 20-21, '468 discloses the door closer of claim 18, except further comprising a tube-shaped bushing which is detachably connected to the housing and extends orthogonally therefrom, the first spring being supported in the tube-shaped bushing. '468 instead discloses the first spring extending orthogonally with respect to the end of the housing and wherein the spring is directly mounted in the housing.

  Examiner takes official notice that it is old and well known to use a bushing in order to reduce friction between a moving piece such as a spring and a housing. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied a bushing to the housing and spring of '468 in order to reduce friction and wear on the housing and spring.
- 12. Examiner's assertion of official notice from the Office Action Mailed 10/14/2008 with regards to using a bushing in order to reduce friction between a moving piece such as a spring and a housing is now taken to be admitted prior art due to Applicant's failure to traverse said official notice (see MPEP § 2144.03).

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13. Further, '468 in view of ' 092 does not teach wherein the tube shaped bushing extends orthogonally to the longitudinal housing direction. It would have been obvious to one of ordinary skill in the art at the time of the invention to rearrange the tube shape bushing and spring member so as to be orthogonal to the longitudinal housing direction

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as it has been held that rearranging parts of an invention involves only routine skill in

the art. In re Japikse, 86 USPQ 70. See also, In re Kuhle, 526 F.2d 553, 188 USPQ 7

(CCPA 1975). See also MPEP 2144.04.

- 14. For Claims 22-23, '468 in view of '092 teaches the door closer of claim 21,except further comprising a casing detachably connected to the housing and the tube-shaped bushing, the pump and the drive motor being received in the casing. '468 instead teaches the pump and drive motor housed in an integral compartment with the housing of the door closer. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to separate the pieces of the housing to allow for the motor and pump to be in a separate casing in order to better isolate the pump and motor from the hydraulic fluid of the door closer, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

  Nerwin v. Erlichman, 168 USPQ 177, 179.
- 15. For Claim 24, '468 further discloses the door closer of claim 20, wherein the blocking member comprises a cup-shaped insert (28) displaceably supported in the housing.
- 16. For Claim 25, '468 discloses the door closer of claim 24, wherein the cup-shaped insert has a bottom (left side of 28 in Fig. 2) facing the shaft (13), the blocking member

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further comprising a support (27) which protrudes from the bottom of the cup-shaped insert into the housing and has a roller (26) cooperating with the shaft (13).

- 17. For Claim 26, '468 discloses the door closer of claim 24, wherein the first spring (29) is disposed in the integral housing containing the spring and loads the cup-shaped insert in the direction of the housing/shaft.
- 18. For Claim 27, '468 in view of '092 discloses the door closer of claim 24, except further comprising a friction or wear reducing element between the tube-shaped bushing and the cup-shaped insert. Examiner takes official notice that it is old and well known to use a bushing and a friction or wear reducing element (such as oil) in order to reduce friction between a moving piece such as a spring and a housing. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have applied a bushing to the cup and spring of '468 in order to reduce friction and wear on the housing and spring.
- 5. Examiner's assertion of official notice from the Office Action Mailed 10/14/2008 with regards to using a bushing and a friction or wear reducing element (such as oil) in order to reduce friction between a moving piece such as a spring and a housing is now taken to be admitted prior art due to Applicant's failure to traverse said official notice (see MPEP § 2144.03).
- 19. For Claim 28, '468 further teaches the door closer of claim 18, further comprising an eccentric disc (22) mounted on the shaft, and a second spring (44) which charges the brake piston (37) toward the eccentric disc.

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20. For Claim 29, '468 further teaches the door closer of claim 18, except further comprising a seal between the housing and the brake piston. '092 further teaches a seal between the housing and a brake piston (as seen in Fig. 7).

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- 21. For Claim 30, '468 further discloses the door closer of claim 18, further comprising a valve arrangement (46, 48), and wherein the brake piston is lockable in a predetermined position by means of the valve arrangement.
- 22. For Claim 31, '468 discloses the door closer of claim 30, wherein the valve arrangement comprises a regulating valve (46), and a shut-off valve (48) which affects flow of the regulating valve.
- 23. For Claim 32, '468 discloses the door closer of claim 31, wherein the shut-off valve (48) automatically opens at a predetermined pressure (column 6, lines 48-49).
- 24. For Claim 33, '468 discloses the door closer of claim 31, except wherein the shut-off valve is operable to be electro-magnetically actuated. Examiner takes official notice that electromagnetically controlled valves are old and well known. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have replaced the shut-off valve in '468 with an electromagnetically actuated control valve to control the door closer electronically.
- 25. Examiner's assertion of official notice from the Office Action Mailed 10/14/2008 with regards to electromagnetically controlled valves is now taken to be admitted prior art due to Applicant's failure to traverse said official notice (see MPEP § 2144.03).
- 26. For Claim 34, '468 discloses the door closer of claim 28, wherein the brake piston (37) comprises a roller (35) which engages the eccentric disc (22).

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27. For Claim 35, '468 discloses the door closer of claim 18, wherein the brake piston is coupled to the shaft by means of a rocker (44, wherein an oscillating spring is considered a device capable of operating with a rocking motion) and an eccentric disc (22).

# (10) Response to Argument

Regarding Claim 18, Applicant argues that the claimed invention requires more than a mere rearranging of the elements in '468, such as rearranging the spring of '468 to extend orthogonally to the longitudinal housing direction, in order to operate properly. Applicant further argues that additional modification would be required to rearrange the first spring so as to be orthogonal to the longitudinal housing direction. The first spring of '468 applies a force to the blocking member (28) which applies force to a roller (26) which rolls against the shaft (13). The spring, blocking member, and roller would maintain the same function by rearranging the parts to be located orthogonally to the longitudinal direction of the housing. It is maintained that these parts would merely be rearranged and would provide the same function as per the original disclosure of '468. It is further submitted that Sittmann, US 3,742,553 is shown as evidence that it is old and well known in the art to arrange a spring member (Fig. 1: 18) of a door closer orthogonally to a longitudinal housing direction. Examiner maintains that modification of '468 to merely rearrange a longitudinal spring member in a known orthogonal arrangement would be obvious to one of ordinary skill in the art at the invention was made.

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Regarding Claim 18, Applicant further argues that due to the close proximity of the pivot members in the proposed modification of '468, the plunger 28 may interfere with the roller 35. This, however, is merely speculation as Fig. 2 of '468 appears to show the members in such a way that rearrangement of the spring member to be orthogonal to the longitudinal housing direction would not cause interference.

Regarding Claim 18, Applicant further argues that one skilled in the art will not be motivated to rearrange the spring or piston end orthogonally to the longitudinal direction of '468 because such a modification will cause the piston end portion to extend orthogonally to the door panel which compromises the aesthetic appearance and creates a hazardous situation to the users passing through the doorway. However, as evidenced by Sittmann, US 3,742,553, the arrangement of the spring orthogonally to the longitudinal housing direction does not necessarily compromise an aesthetic appearance or create a hazardous situation to the users passing through the doorway. It is further noted that Claim 18 only requires that the first spring extends orthogonally from the longitudinal housing direction. Claim 18 does not claim the piston end extending orthogonally to the longitudinal housing direction, as is being argued by Applicant.

Regarding Claim 18, Applicant argues that there is no teaching or motivation to support the combination of '468 and '092. Specifically, Applicant argues that the two references teach two different closer mechanisms (cam and tooth rack). '092 is merely a teaching reference and teaches modifying an embodiment having a liquid medium (Fig. 1) with a pump (Fig. 7) to allow for motorized operation of the system. '468 discloses a closer

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having a liquid medium (oil). There would have been a reasonable expectation of success to modify the closer with a pump to move oil from one side of a piston member to the other in order to allow for motorized operation.

Regarding Claim 18, Applicant further argues that incorporation of the pump of '092 would require modification of the valves of '468, it has been held that the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art. In re Bozek, 163 USPQ 545 (CCPA 1969). As such, the combined teachings of '468 and '092 teach that it is known in the art to modify a door closer or opener having a liquid medium between on opposite sides of a piston with a pump to allow for motorized operation. Regarding Claim 18, Applicant further argues that '092 does not teach a first space, however as noted in the rejection, '092 teaches a first space (9) as seen in Fig. 7. Applicant also appears to argue that '092 does not teach a piston, however, '092 teaches a piston (3) as seen in Fig. 7. If Applicant intends to argue that the piston of '092 is not the same as the piston of '468, Examiner notes that the rejection is based on the combined teachings of '468 and '092 and that one of ordinary skill in the art at the time of the invention would be capable of modifying the closer of '468 with the pump of '092 in such a way as to correspond to the piston and first space member of '468. Regarding Claims 19-35, Applicant argues these claims are allowable because they depend either directly or indirectly from independent claim 18. Examiner maintains that

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claim 18 is properly rejected as indicated above, as such, Claims 19-35 remain rejected as no further arguments are presented with respect to these claims.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jeffrey O'Brien /JO/ 11/17/2009

/Victor Batson/ Supervisory Patent Examiner, Art Unit 3677

Conferees:

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